APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/568,183	02/13/2006	Behnam Azvine	36-1956	5484

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EXAMINER
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ART UNIT	PAPER NUMBER
3687	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	10/568,183	AZVINE ET AL.
	Examiner	**Art Unit**	
	R. SHAY GLASS	3687	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS,
WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>19 January 2010</u>.
2a)☐ This action is **FINAL.** 2b)☒ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
   closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-40</u> is/are pending in the application.
   4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) <u>1-40</u> is/are rejected.
7)☐ Claim(s) _____ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a)☐ All b)☐ Some * c)☐ None of:
       1.☐ Certified copies of the priority documents have been received.
       2.☐ Certified copies of the priority documents have been received in Application No. _____.
       3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
          application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☒ Information Disclosure Statement(s) (PTO/SB/08)
   Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date _____.
5)☐ Notice of Informal Patent Application
6)☐ Other: _____.

DETAILED ACTION

Election/Restrictions

Applicant's recent amendment has effectively linked the patentably distinct inventions

previously noted in the restriction dated 12/18/2009, into a single invention by making

inventions II and III dependent upon invention I. Applicant has elected claims 1-22

corresponding to invention I.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in
a printed publication in this or a foreign country, before the invention thereof by the
applicant for a patent.

Claims 1-40 are rejected under 35 U.S.C. 102(a) as being anticipated by Srinivasa et

al., US Pub. No. US 2003/0115189.

12.   A method of deriving a user model from a plurality of event records relating to events,

each event record comprising data relating to attributes of an event, (see Srinivasa, ¶

0033)(disclosing the creation/updating of user's electronic calendar, which is considered to be a

model), the method comprising:

identifying a plurality of sequences of event records from said plurality of event records,

each sequence containing a plurality of event records, (see Srinivasa, ¶ 0035)(disclosing finding

information from web sites related to types of activities and specific events within activity

types);

determining a plurality of sequence clusters from said plurality of sequences, each sequence cluster comprising a plurality of related sequences, (see Srinivasa, ¶ 0036, fig. 13 #416);

analyzing the sequences in a cluster and deriving one or more rules relating to the sequences of that cluster, (see Srinivasa, ¶ 0077)(disclosing rules derived via inductive learning); and

providing a user model based on rules derived in relation to a plurality of clusters, (see Srinivasa, ¶ 0033).

13.   A method according to claim 12, wherein each event record comprises data relating to one or more of the following attributes of an event: the type of the event; the location of the event; the duration of the event; the date of the event; and the time-of-day of the event, (see Srinivasa, ¶ 0077-78)(disclosing event information such as time, location and date, a.k.a. T and L-type event information).

14.   A method according to claim 12, wherein each event record comprises event-time data relating to the date and/or time-of-day of an event, and event-type data relating to the type of event, (see Srinivasa, ¶ 0078)(disclosing E-type event information).

15.   A method according to claim 12, wherein a sequence of event records contains event records relating to two events, (see Srinivasa, Fig. 10).

16.   A method according to claim 12, further comprising a step of evaluating a measure of the distance between events according to a predetermined event-space distance function, (see Srinivasa, fig. 9).

17.   A method according to claim 16, wherein said identifying step comprises identifying

sequences with reference to the value of the distance measure between events, (see Srinivasa, fig. 9).

18.   A method according to claim 12 further comprising:

     a step of generating, in relation to each cluster, artificial sequences, each artificial sequence containing two or more event records, said artificial sequences being different to the sequences of that cluster that have been identified from said event records, (see Srinivasa, fig. 13 #416); and

     a step of deriving a measure of sequence probability for each artificial sequence indicative of the likelihood that said artificial sequence contains event records relating to two or more related events, (see Srinivasa, fig. 13 #420).

19.   A method according to claim 18, wherein said measure of sequence probability of an artificial sequence is derived with reference to a measure of the distance between the events, evaluated according to a predetermined event-space distance function, (see Srinivasa, fig. 9).

20.   A method according to claim 18, further comprising a step of designating an artificial sequence as a positive or a negative example of the user's behavior with reference to said measure of sequence probability, wherein the rule deriving step takes account of negative examples within a cluster when deriving rules relating to the sequences of that cluster, (see Srinivasa, ¶ 0053)(disclosing a decision method to determine whether a test page is a member or non-member of a particular event category, wherein the threshold probability value is determined based upon, *inter alia*, non-members, and wherein a non-member is considered to be a negative example).

21.   A method according to claim 12, further comprising a step of analyzing said sequence

clusters and determining therefrom a probability distribution in respect of the types of sequences identified by said identifying means, (see Srinivasa, fig. 6, ¶ 0048)(disclosing that member documents have a high probability of occupying a subspace of high-dimensional term space).

22.   A method according to claim 12, wherein said event records relate to activities of an individual user, (see Srinivasa, ¶ 0033)(disclosing the creation/updating of user's electronic calendar).

32.   A method for generating potential event records relating to potential events which may follow or precede known events having known event records, each event record comprising data relating to attributes of an event, from a user model comprising rules relating to sequences of event records, (see Srinivasa, ¶ 0035)(disclosing finding information from web sites related to types of activities and specific events within activity types), the method comprising the steps of:

identifying from said user model rules relating to sequences which include a known event record, (see Srinivasa, ¶ 0053)(disclosing various well-known classification algorithms);

generating from said rules event records relating to events which may follow or precede the event to which said known event record relates, (see Srinivasa, ¶ 0053)(disclosing matching the shapes of member classes "records relating to events" in the category according to the rules);

identifying from said rules a measure of probability in relation to each generated event record, (see Srinivasa, ¶ 0053)(disclosing a decision method to determine whether a test page is a member or non-member of a particular event category based upon a probability value);

selecting one or more generated event records having the highest or relatively high measures of probability as potential event records each relating to a potential event to follow or precede said known event, (see Srinivasa, ¶ 0053).

33.   A method according to claim 32, further comprising a step of providing said

selected event records as suggestions to a user, (see Srinivasa, ¶ 0056)(disclosing alerting the

user of events).

34.   A method according to claim 32, further comprising a step of incorporating said selected

event records in a user's diary, (see Srinivasa, ¶ 0056)(disclosing populating the users calendar).

35.   A method according to claims 32, wherein said known event records relate to activities of

an individual user, (see Srinivasa, ¶ 0056)(disclosing the users interests).

36.   A method for determining a potential sequential order for a plurality of known events,

(see Srinivasa, figs. 14a and 14b), each known event having a known event record, each event

record comprising data relating to attributes of the event, from a user model comprising rules

relating to sequences of event records, the method comprising the steps of:

        designating each of said known events as a potential first or last event in a series, (see

Srinivasa, ¶ 0071)(disclosing the creation of hypothesis sets);

        identifying, in relation to each potential first or last event, rules from said user model,

said rules relating to sequences which include the event record relating to said potential first or

last event, (see Srinivasa, ¶ 0053)(disclosing various well-known classification algorithms);

        identifying from said rules event records relating to other known events which may

potentially follow or precede the potential first or last event to form a series of events, (see

Srinivasa, figs. 14a and 14b, ¶ 0073)(disclosing extracting all events for an event page);

        identifying from said rules measures of probability in relation to a plurality of series, each

series comprising a potential first or last event and a known event which may potentially follow

or precede said potential first or last event, (see Srinivasa, ¶ 0053)(disclosing a decision method

to determine whether a test page is a member or non-member of a particular event category

based upon a probability value);

selecting one or more of said series having the highest or relatively high measures of

probability as potential sequential orders for a plurality of known events, (see Srinivasa, figs. 14a

and 14b)(one has been selected in the figure).

37.   A method according to claim 36, further comprising a step of providing said selected

sequential orders as suggestions to a user, (see Srinivasa, ¶ 0056)(disclosing alerting the user of

events).

38.   A method according to claim 36, further comprising a step of incorporating said selected

sequential orders in a user's diary, (see Srinivasa, ¶ 0056)(disclosing populating the users

calendar).

39.   A method according to claim 36, wherein said known event records relate to activities of

an individual user, (see Srinivasa, ¶ 0056)(disclosing the users interests).

40.   A method according to claim 32, wherein said user model is a user model derived using a

method of deriving a user model from a plurality of event records relating to events, each event

record comprising data relating to attributes of an event, (see Srinivasa, figs. 14a and

14b)(disclosing a user model), the method comprising.

identifying a plurality of sequences of event records from said plurality of event records,

each sequence containing a plurality of event records, (see Srinivasa, ¶ 0035)(disclosing finding

information from web sites related to types of activities and specific events within activity

types);

determining a plurality of sequence clusters from said plurality of sequences, each

sequence cluster comprising a plurality of related sequences, (see Srinivasa, ¶ 0036, fig. 13

#416);

analyzing the sequences in a cluster and deriving one or more rules relating to the

sequences of that cluster, (see Srinivasa, ¶ 0077)(disclosing rules derived via inductive learning);

and

providing a user model based on rules derived in relation to a plurality of clusters, (see

Srinivasa, ¶ 0033).

As per claims 1-11 and 23-31, these system claims contain identical subject matter as

claims 12-22 and 32-40, Therefore, the rejection of those claims is applied herein by reference.

Conclusion

The following are suggested formats for either a Certificate of Mailing or Certificate of
Transmission under 37 CFR 1.8(a). The certification may be included with all correspondence
concerning this application or proceeding to establish a date of mailing or transmission under 37
CFR 1.8(a). Proper use of this procedure will result in such communication being considered as
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Please refer to 37 CFR 1.6(d) and 1.8(a)(2) for filing limitations concerning facsimile
transmissions and mailing, respectively.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to R. SHAY GLASS whose telephone number is (571)272-7285.

The examiner can normally be reached on weekdays between 9AM and 5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, MATTHEW GART can be reached on 571-272-3955. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would

like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/R. SHAY GLASS/
Examiner, Art Unit 3687

/Vanel Frenel/
Primary Examiner, Art Unit 3687
April 25, 2010